

REMARKS

Claims 1-26 were presented for examination, and claims 1-26 were rejected. In the present amendment, claims 2, 9, 11-18, and 25 were amended, and claims 27-30 were added. No new matter was introduced. Upon entry of the present amendment, claims 1-30 will be pending in this application, of which claims 1, 10, 19, 23 and 27 are independent. Applicants submit that pending claims 1-36 are in condition for allowance.

The following comments address all stated grounds of rejection. Applicants urge the Examiner to pass the claims to allowance in view of the remarks set forth below.

Drawing Amendments

The Examiner objected to the drawings as failing to comply with 37 C.F.R. 1.84(p)(5) because they do include references mentioned in the specification. Specifically, reference signs 10, 12, 16, 18, 20, 22, 24, 26, 28, 30, 23 and 34 are mentioned in connection with describing Figure 1 on page 7 of the specification. Figure 1 is hereby amended to include the reference numbers as described in the specification. Applicants submit that the above drawing amendments are not directed to any art rejection. No new matter has been introduced.

Specification Amendment

The Examiner objected to the disclosure because of informalities. Specifically, on page 10, line 23, and page 11, line 4, the specification uses the reference number of 190 to refer to the model diagram of Figure 5 labeled with a reference number of 193. The specification is hereby amended to use the reference number 193 to refer to the model

diagram of Figure 5. Applicants submit that the above specification amendment is not directed to any art rejection. No new matter has been introduced.

Claim Amendments

Claims 2, 9, 11-18, and 25 have been amended to address issues with antecedent basis identified in the Examiner's claim rejections under 35 U.S.C. §112 as discussed below.

Claims 27-30 have been added to more fully appreciate the Applicants' claimed invention.

Support for the added claims can be found on page 8, line 23 to page 9, line 14; Figures 4 and 5; and throughout the remainder of the specification. No new matter has been introduced.

Applicants submit that the presently pending claims are in condition for allowance.

Claim Rejections under 35 U.S.C. §112

I. Claims 2, 8, 9, 11-18 and 25 Rejected under 35 U.S.C. §112

Claims 2, 8, 9, 11-18, and 25 are rejected under 35 U.S.C. §112, second paragraph, as not particularly pointing out and distinctly claiming the subject matter, which the Applicants regard as their invention. Applicants respectfully traverse this rejection and submit that the amendments to claims 2, 8, 9, 11-18, and 25 address the Examiner's rejections.

The Examiner rejects claims 2, 8, 9, 11-18, and 25 for reciting claim limitations without antecedent basis. Specifically, claims 2 and 11 are rejected for reciting the limitation of "the selection" without antecedent basis. Claims 8 and 17 are rejected for reciting the limitation of "the hypertext language" without antecedent basis. Also, claims 9 and 18 are rejected for reciting the limitation of "the sections" without antecedent basis. Additionally, claims 11-18 are rejected for reciting the limitation of "the method" without antecedent basis. Finally, claim 25 is rejected for reciting "the Internet" without antecedent basis.

Accordingly, claims 2, 8, 9, 11-18, and 25 are hereby amended to correct these antecedent deficiencies.

In light of the aforementioned amendments, claims 2, 8, 9, 11-18, and 25 particularly point out and distinctly claim the subject matter to which Applicants regard as their invention. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of claims 2, 8, 9, 11-18, and 25 under 35 U.S.C. §112.

Claim Rejections under 35 U.S.C. §102

II. Claims Rejected under 35 U.S.C. §102 as Anticipated By Ciolfi

Claims 1, 4, 5, 10, 13, 14, 19 and 23-26 are rejected under 35 U.S.C. §102(e) as anticipated by the reference of U.S. Publication No. 20030107595 to Ciolfi ("Ciolfi"). Applicants respectfully traverse this rejection.

For ease of the discussion, summaries of the claimed invention and the Ciolfi reference are provided below.

A. Summary of Claimed Invention

The claimed invention is directed towards generating a report about source code associated with a graphical model, such as a block diagram model. The report is generated to include hyperlinks referencing elements of the block diagram model, such as a block. The hyperlinks may be provided in the portions of the report describing source code related to the element of the block diagram model referenced by the hyperlink. For example, a reference in the source code identifying the element of the block diagram model is replaced with a hyperlink to the element when the source code report is generated. In this manner, in viewing the report related to the source code, the hyperlink can be selected and the referenced element of the block diagram model displayed and identified, such as by highlighting. As such, the present invention provides systems and method for easy access and direct navigation from a

report about the source code of the graphical model to elements of the graphical model associated with the source code.

B. Summary of Ciolfi

The Ciolfi reference is directed towards handling parameters in a block diagram model to provide run-time parameters. Ciolfi describes a parameter processing mechanism for defining run-time parameters and mapping user-specified parameters to run-time parameters for simulation and automatic code generation. Run-time parameters are the block parameters used during execution of the block diagram model or in generated code. During block diagram model processing for simulation or code generation, the parameter processing mechanism evaluates a block's user-specified parameters to determine numerical values of parameter expressions specified by the user, and to construct a data structure representing parameter expressions with interfaced variables.

For each block in the block diagram model, the parameter processing mechanism sets up and maintains run-time parameters for the block. The parameter processing mechanism defines run-time parameters, maps the run-time parameters to user-specified parameters, and registers the run-time parameters with a block diagram processing engine. The parameter processing mechanism pools together like run-time parameters that are non-interfaced, i.e., constants, which will not change in the generated code or during simulation. For interfaced run-time parameters, the parameter processing mechanism creates a run-time parameter expression execution structure that allows interfaced variables to be accessed during model simulation or mapped to generated code. In contrast to the claimed invention, Ciolfi does not discuss providing hyperlinks in reports about source code generated from the block diagram model.

C. Patentability of Independent Claims 1, 10, 19, and 23

Independent claims 1, 10, 19, and 23 are directed to a method, system, computer program and apparatus, respectively. These independent claims recite generating source code corresponding to a block diagram model, and *generating hypertext links associating elements of the generated source code with elements of the block diagram model*.

Coilfi does not disclose *generating hypertext links associating elements of the generated source code with elements of the block diagram model*. Rather, as discussed above, Coilfi is concerned with providing run-time parameters for model execution from user-specified parameters in blocks of the block diagram model. In the Office Action, the Examiner indicates that Ciolfi demonstrates links which are generated to associate source code with the diagram. The Examiner cites the text of page 8, paragraph 76 of Ciolfi as demonstrating such links. Applicants respectfully disagree with the Examiner, and submit that the cited text does not disclose *hypertext links associating elements of the generated source code with elements of the block diagram model* as in the claimed invention. As described in Ciolfi, the cited text is information provided by a block about how generated code should look for code generation (see page 8, paragraph 80 of Ciolfi). The cited text is content of a file defining the format of the block output for the case of an S-function block example. Furthermore, neither the cited text itself nor Ciolfi describe the code of the block output as containing hyperlinks. Therefore, Coilfi fails to disclose *generating hypertext links associating elements of the generated source code with elements of the block diagram model*.

For at least the aforementioned reasons, Coilfi fails to disclose *generating hypertext links associating elements of the generated source code with elements of the block diagram model*. Claims 4 and 5 depend on and incorporate all the patentable limitations of independent claim 1. Claims 13 and 14 depend on and incorporate all the patentable limitations of independent claim 10. Claims 24-26 depend on and incorporate all the

patentable limitations of independent claim 23. Thus, Ciolfi fails to detract from the patentability of claims 4, 12, 14, and 24-26. Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the Examiner's rejection of claims 1, 4, 5, 10, 13, 14, 19, and 23-26 under 35 U.S.C. §102.

Claim Rejections under 35 U.S.C. §103

III. Dependent Claims Rejected under 35 U.S.C. §103 as Unpatentable

Claims 2, 7, 11, and 16 are rejected under 35 U.S.C. §103 as unpatentable over Ciolfi in view of U.S. Publication No. 20020054138 to Hennum ("Hennum"). Claims 3 and 12 are rejected under 35 U.S.C. §103 as unpatentable over Ciolfi in view of Hennum and in further view of U.S. Patent No. 6,049,835 to Gagnon ("Gagnon"). Claims 6, 8 and 15 are rejected under 35 U.S.C. §103 as unpatentable over Ciolfi in view of U.S. Publication No. 20020072049 to Prahalad ("Pralhad"). Claims 9 and 18 are rejected under 35 U.S.C. §103 as unpatentable over Ciolfi in view of U.S. Publication No. 20030120549 to Lindner ("Lindner"). Claim 17 is rejected under 35 U.S.C. §103 as unpatentable over Ciolfi in view of Hennum in further view of Prahalad. Claims 20-22 is rejected under 35 U.S.C. §103 as being unpatentable over Ciolfi in view of Hennum in further view of Prahalad. Applicants respectfully traverse these rejections.

None of the cited references, including Ciolfi, alone or in combination, disclose, teach, or suggest each and every feature of independent claims 1, 10, 19, and 23. As discussed above, Ciolfi does not disclose *generating hypertext links associating elements of the generated source code with elements of the block diagram model*. None of the Examiner cited references, including Hennum, Gagnon, Prahalad, and Lindner, detract from the patentability of these independent claims. As such, Applicants contend that independent claims 1, 10, 19, and 23 are patentable and in condition for allowance.

Claims 2, 3, and 6-9 depend on an incorporate the patentable subject matter of independent claim 1. Claims 11, 12, and 15-18 depend on an incorporate the patentable subject matter of independent claim 10. Claims 20-22 depend on an incorporate the patentable subject matter of independent claim 23. As such, Applicants submit dependent claims 2, 3, 6- 9, 11, 12, 15-18, and 20-22 are patentable and in condition for allowance. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw the Examiner's rejection of claims 2, 3, 6- 9, 11, 12, 15-18, and 20-22 under 35 U.S.C. §103.

IV. New Claims 27-30

Independent claim 27 recites a method for providing source code identifying an element of a graphical model, generating a document comprising information about the source code, and *providing, in the document, a hyperlink referencing the element of the graphical model*. None of the cited references, including Coilfi, disclose, teach, or suggest *providing, in the document, a hyperlink referencing the element of the graphical model*.

Applicants respectfully submit that none of the cited references, including Coilfi, disclose, teach, or suggest each and every element of claim 27. Claims 28-30 depend on and incorporate the patentable subject matter of independent claim 27. As such, none of the cited references disclose, teach, or suggest each and every element of claims 28-30. Therefore, Applicants respectfully submit that claims 27-30 are patentable and in condition for allowance.